

The nation's largest urban national park At-A-Glanco

153,700 Acres within the National Park boundary Private ownership or landowners California Department of Parks & Recreation land National Park Service land 15% Other public parkland

Animal species

Distinct plant communities

Federal and state listed endangered plant and animal species

1,000 Recorded archeological sites Native American pictograph sites

33 million Annual visitation

17 million Population in the Greater Los Angeles Area

Visitor information centers

Amphitheaters

Campsites

Picnic sites

385 Miles of trails

95 Employees

58.782 Volunteer hours in 2007

Cooperating government agencies

Cooperating non-government organizations

265 Homeowner associations

Appropriated base budget (or enacted budget) Appropriated non-base budget (or project funding)

The Santa Monica Mountains National Recreational Area was created in 1978 through the action of people concerned about expansive urban growth and the loss of southern California's wild landscapes. The impact and legacy of their work are immeasurable. Today, over 80,000 acres of beaches, streams, and mountain peaks are preserved for the inspiration and enjoyment of future generations. Millions of visitors come annually to walk among ancient oaks, 'catch a wave' at County Line beach, or enjoy a campout with family and friends.

While much has been accomplished, the preservation of the Santa Monica Mountains is unfinished. A new generation of community stewards is continuing the legacy of their predecessors by working with park rangers to gather scientific information, restore native habitats, and increase access to parks and nature for everyone.

This "Year in Review" highlights a few signature projects accomplished by a community of people who care about parks.

- Woody Smeck, Superintendent



EcoHelpers to the Rescue

Visitors arriving at trailheads in the Santa Monica Mountains are often greeted by weedy fields that are green for just a few months of the year. All over these mountains, native plant communities – coastal sage scrub, chaparral, and oak woodlands – are competing with non-native invasive species, such as mustard, tumbleweed, and foxtail grasses. In these areas, erosion can be high and biodiversity low, with little sign of natural recovery. Compounding the problem is the mountains' patchwork of public and private lands, with backyard plants escaping into nearby parklands.

This sounds like a mission for EcoHelpers – a unique restoration-education program at the Santa Monica Mountains National Recreation Area.

Each year, about 2,000 diverse high school science students from the Los Angeles area are signed on as park volunteers during school field trips.

For many, it is their first visit to a national park, and an outdoor introduction to basic ecology.

During the program's interactive opening, the students learn that plants are the center of the universe, providing food and shelter for wildlife and balancing complex food webs. They then take a guided walk to see these concepts in action and discover signs of (or spot!) local animals. They finish with a crash course in Gardening 101, picking partners and planting two one-gallon plants each. This mix of community service and education qualifies the students for "service learning" credit, a graduation requirement in most school districts.

The EcoHelpers project is a close collaboration between two of the park's divisions. Resource Management scientists and technicians oversee the restoration planning and nursery operation — we grow our own — while Interpretation rangers focus on the education elements and field trips. Both divisions enlist adult volunteers, and gather state and federal funding for the program's full-time coordinators, tools, and school buses. Other divisions also pitch in: Maintenance staff install needed equipment and signage at the restoration sites, while Law Enforcement rangers help secure the sites from vandalism.

In 2006–07 school year, EcoHelpers restored
1.5 acres in Zuma Canyon with 4,500 native plants
of 21 species. The previous four years in both

Solstice and Zuma canyons have produced similar results, with a grand total of 8,000 students planting 6 acres with 15,000 plants. This recent year, we also enlisted community groups to lend a hand on weekends, with Girl Scout troops and Jane Goodall's "Roots and Shoots" contributing regularly. Meanwhile, associated research by park staff and interns is improving plant survival, minimizing weed regrowth, and charting the return of wildlife.

All told, the EcoHelpers workforce is shaving decades off habitat recovery time. Come see the results at Zuma and Solstice canyons, and watch the wildlife settle in!

— Jack Gillooly, Interpretive Park Ranger





Research learning centers are relatively new programs of the National Park Service established to foster connections between the parks and the nation's research and education communities.

The protected landscapes of the National Park
Service represent excellent natural laboratories
for scientific or scholarly study. Research learning
centers help national parks form partnerships
with outside researchers to facilitate studies that
will expand our understanding of park resources.
Improved knowledge of the resources in turn helps
park managers make informed decisions about
how to best protect and preserve national parks
for the American people.

Research learning centers also foster partnerships with educators and nonprofit groups to improve public understanding about science in the parks and to promote stewardship of these special places. In an effort to inspire learning and public involvement in the parks, research learning centers partner with programs that engage volunteers as "citizen scientists." By participating in citizenscience activities, volunteers help scientists gather data that can inform park managers about the condition of the resource, while developing new connections to parklands.

The California Mediterranean Research Learning Center (CMRLC) serves the three National Park Service units along southern California's coast: Cabrillo National Monument, Channel Islands National Park, and Santa Monica Mountains National Recreation Area. These parks protect some of the best remaining examples of California's Mediterranean ecosystem, which is a highly diverse but rapidly disappearing ecosystem.

The CMRLC is working with partners to develop and support research and education projects that help preserve park resources and promote their stewardship. As part of its commitment to this mission, the CMRLC has joined with partners in San Diego to initiate a distance learning program. The project will expand visitor access to the parks via wireless communications and a Live Interactive Virtual Exploration backpack system developed by partners at the High Performance Wireless Research and Education Network and the San Diego State University Field Stations Program. Through an Internet connection, audiences interact in real-

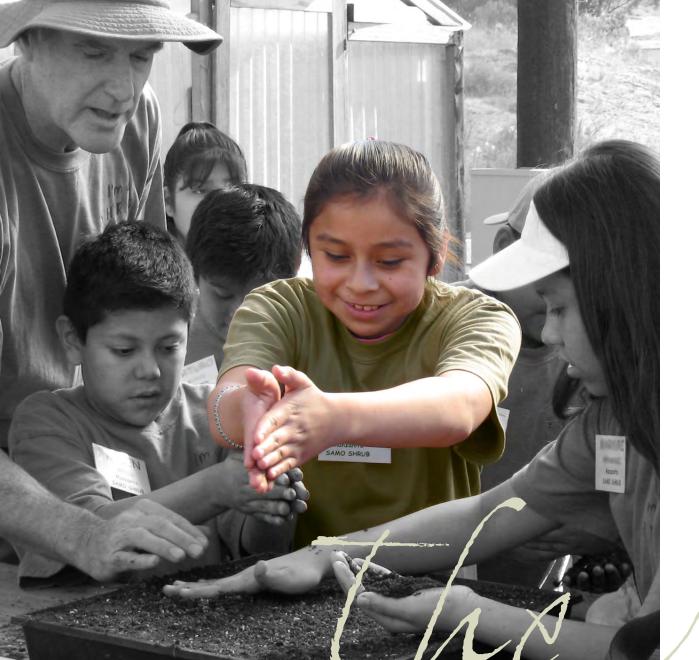
time with interpretive rangers and scientists at the parks. Cabrillo National Monument began operation of the wireless system for its distance education programs in October 2007.

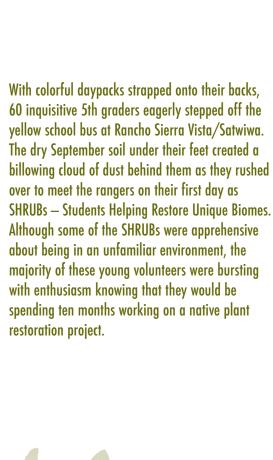
The CMRLC also works with education groups, such as Santa Monica College and the California Science Center, leading students on field excursions in the national parks to learn about Mediterranean ecosystems. Students of all ages, and sometimes their families, participate in experiential learning activities that highlight the relationships that exist in local environments. Like these often complex environmental relationships, the research and educational connections fostered by the CMRLC rely on cooperation between several entities. The CMRLC's efforts are helping to expand and strengthen a community of people who are learning and care about parks.

— Morgan Robertson, CMRLC Specialist









During the 2006-07 school year, the SHRUBs from Manzanita Elementary School, a Title 1 school in nearby Newbury Park, worked side-by-side with park rangers and restoration staff collecting 2,000 seeds, sowing 900 seeds in the park's plant nursery, and planting and caring for over 180 native plants at a quarter-acre restoration site. They proudly restored degraded grassland habitat to native coastal sage scrub and riparian communities while also participating in hour-long lessons on native flora and fauna; geology; effects of invasive species on native plants, animals, and water cycles; the scientific method; public speaking; and camping skills.

Part of their project included teaching others about their restoration activities. The SHRUBs developed art and text for two temporary wayside exhibits to inform the public about their project. They also presented two programs about their project to over 220 people, including their families and friends, and their school's 4th graders — to help prepare them to be the next generation of SHRUBs.

After months of hard work, the SHRUBs were treated to a campout at Circle X Ranch in the Santa Monica Mountains. It was the first camping trip for many of these students, one of whom wrote of the experience: "The best part of the SAMO camping trip was seeing the bright stars at night... I stayed up because I couldn't stop

looking at them... It was amazing and a great ending to our busy day."

Eating s'mores by a fire, sleeping in a tent with friends, and hiking to the top of the mountain were just some of the other highlights from their two-day adventure.

Although the last yellow school bus full of SHRUBs has come and gone for the year, the students continue to return with their families to visit the places where they saw their first coyote, smelled their first sage brush, and placed their first plant in the ground. These are lasting memories that will hopefully inspire them to continue to explore, help, and protect the Santa Monica Mountains.

— Lisa Okazaki, Interpretive Park Ranger

Students Helping Restore Unique Biomes

Supporting Conservation through Science

In 2001 the National Park Service undertook a project to map the vegetation of the Santa Monica Mountains, Simi Hills, and nearby natural areas. This 320,000-acre region forms an ecological island defined by urban development to the north and east, agriculture to the west, and the Pacific Ocean to the south. Vegetation maps must be based on a vegetation classification — an organization of plant assemblages into consistently recognizable units defined by floristic and ecological characteristics. Because a systematic vegetation classification had not been done for the Santa Monica Mountains region, it was necessary to develop a classification in order to create the map.

The development of this vegetation classification was an enormous undertaking. Over 4,100 field surveys, ranging across all ecological zones in the region, were made. The final analysis relied on a set of 254 species and 3,912 samples partitioned into 84 alliances or unique stands, 204 associations, and 73 phases of associations. Todd Keeler-Wolf, the senior vegetation ecologist for the California Department of Fish & Game, remarked that the robustness and level of detail of the Santa Monica Mountains classification are unsurpassed in California vegetation classification.

Once the classification was completed, we could create the map. This work was largely accomplished using aerial photographs – first, by identifying the

photographic signatures of known stands at field sites; then, correlating those signatures throughout the region using a minimum unit for recognizing a vegetation stand set at one acre. Like the classification, the map proved to be a large task. Everyone involved was surprised at our local vegetation diversity, and ultimately over 50,000 stands of natural and modified vegetation were recognized and mapped. The map is now complete and we are in the process of field sampling-a critical last step to ensure its accuracy and effective use. Although the accuracy assessment is not complete, the map has already been employed by a multi-agency taskforce to inform and guide vegetation recovery operations in the aftermath of last year's Griffith Park fire, and we anticipate many similar uses.

The classification and mapping project was implemented by a team of staff from NPS (field sampling), the California Department of Fish and Game and the California Native Plant Society (vegetation classification), and ESRI and Aerial Information Systems (photography interpretation and map creation). The project was funded by the National Park Service's Fire and Inventory and Monitoring programs with generous support from the Santa Monica Mountains Conservancy, the Army Corps of Engineers, and Ventura County.

This classification and map are part of the National Park Service commitment to supplying sound, scientific information to local decision makers to support effective conservation in the Santa Monica Mountains.

— John Tiszler, Plant Ecologist









Whether it is on the road to a special event or on display in or outside the park... the SAMObile always gets a second glance. This bi-fuel van is a traveling invitation for visitors to discover some of the fascinating stories and interesting places that make the Santa Monica Mountains National Recreation Area worth visiting and protecting.

The SAMObile's outer shell — a vehicle wrap with colorful images of a mountain lion "hanging out" in the back seat, a backdrop of the Santa Monica Mountains, and two friendly rangers — is only a hint of what's "HEADed your way." Inside the van are four interactive, multi-sensory exhibits that are portable and easy to assemble for community events and trailhead activities

"Santa Monica Mountains National Recreation
Area" is the orientation exhibit. A map with
engaging spot illustrations introduces visitors
to some of the recreation opportunities available
while also illustrating the park's significant natural
and cultural resources.

Other exhibit pieces reflect the fun slogans on the shell: "HEADed your way!" is a pinball-like activity that follows a mountain lion on a sometimes treacherous path through islands of open space. Your roll of the ball determines this puma's fate. "FEETS of Nature" explores amazing plant and animal feats, including some of the hidden 'feets' beneath us. The "TAlLgate Party" is a

wheel of fortune, revealing how nature can teach us useful ways to interact with our environment, share our natural world, and plan for our future. It helps to convey how our actions at home and in the park can help sustain this Mediterranean-type ecosystem for future generations.

The people behind this product to engage the public consisted of six interpretive rangers led by a visual information specialist. This in-house team tackled the planning and design while a contractor was enlisted for the final fabrication. The rangers 'wealth of knowledge and experience in working with the public, as well as from assembling and staffing exhibits in the field, enriched the design.

After brainstorming design concepts, the team built working prototypes to ensure mechanical feasibility. Feedback from school groups and park visitors further refined the design.

The SAMObile entered the public venue. Children's faces rapt with attention and excited reactions from park partners, as well as from other parks inspired by this prototype, confirm that the SAMObile is on course to help build a community that cares about parks.

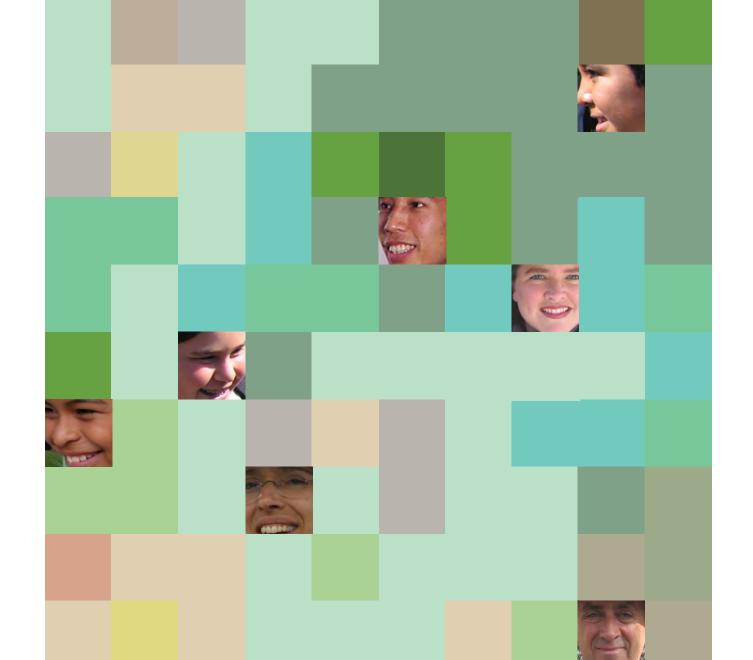
— Amy Yee, Visual Information Specialist

• A Traveling Invitation

People have always played an important part in the preservation of the resources in the Santa Monica Mountains. The grass-roots efforts of a small group of citizen advocates led the way for the establishment of the Santa Monica Mountains National Recreation Area in 1978 to preserve the largest expanse of Mediterranean ecosystem in the National Park System. Those passionate individuals were the charter members of what is now an extensive community of people who care about parklands in the Santa Monica Mountains.

As members of this vital community, our scientists and educators are working with people of all ages to better understand and restore parklands. By reaching out to the park's diverse gateway communities through our research, educational, and service learning programs, we are engaging our nearby and distant neighbors to learn about and value park resources in the Santa Monica Mountains — and we continue the tradition of building a community of people who care about parks.

— Lorenza Fong, Deputy Superintendent





Supporting the education, science, and resource protection efforts of the National Park Service and the California State Parks in the Santa Monica Mountains National Recreation Area

Printing made possible by the Santa Monica Mountains Fund www.samofund.org



For more information:

National Park Service Santa Monica Mountains National Recreation Area 401 West Hillcrest Drive Thousand Oaks CA 91360

805-370-2301 www.nps.gov/samo